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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,682	06/27/2003	Matthew D. Felder	SIG000095	7719

7590 02/21/2007

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EXAMINER	
BRINEY III, WALTER F	
ART UNIT	PAPER NUMBER
2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/607,682	FELDER, MATTHEW D.	
	Examiner	Art Unit	
	Walter F. Briney III	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *5,6,10,17-21 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-9,11-16,22 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 5, 6, 10, 17-21 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04 December 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 3, 4, 7-9, 11-13, 15, 16 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Yuen et al. (US Patent 5,903,868) in view of Nakano (US Patent 4,926,484).**

Note this multiple reference anticipation rejection is pursuant to MPEP § 2131.01 since Nakano merely exposits features inherent to Yuen's disclosure. See column 3, lines 41-43.

Claim 1 is limited to "a method for digitally recording and time stamping an input audio signal during an audio event." Yuen discloses an audio recorder with retroactive storage. See Abstract. Figure 2 of Yuen indicates that the audio recorder includes a microphone 16, sound responsive switch 18, power supply 20, A/D converter 24, compressor 26, memory address control 28, nonvolatile addressable memory 30, D/A

converter 38 and loud speaker 40. Figure 3 depicts a FIFO memory 50 and digital clock 58 in addition to the elements shown in figure 2.

In operation, the recorder of Yuen receives an "input audio signal" through microphone 16. See column 3, lines 36-40. The "input audio signal" is "monitored" by sound responsive switch 18 in the manner disclosed by Nakano. See column 3, lines 41-43. According to Nakano, when a monitored "input audio signal" is above a voltage threshold V_S, an audio event is detected, namely the presence of speech. See column 2, line 63, through column 3, line 2 and lines 58-68. In this way, the threshold V_S corresponds to an "audio event threshold," and comparing the monitored "input audio signal" to V_S corresponds to "determining whether the input audio signal satisfies an audio event threshold." As disclosed by Nakano, the switch 18 of Yuen operates in response to the presence and absence of speech. Yuen expounds on this in column 3, lines 39-45. Moreover, in response to the decision of switch 18, digital recording is initiated. See column 3, line 56, through column 4, line 7. This corresponds to "when the input audio signal satisfies the audio event threshold...digitally recording the input audio signal. In addition to the digitally recorded audio samples, date and time information is also recorded with each captured section of audio. See column 2, lines 45-51. This corresponds to "concurrently with digitally recording the input audio signal, recording time-stamp information corresponding to the input audio signal." Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim 3 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. Column 2, lines 45-51, and column 6, lines 1-6, indicates that a digital clock

58 provides time and date information to mark when an audio capture occurred. The inclusion of time and date information makes it clear that the digital clock is a "real-time clock, such that that the input audio signal is time-stamped with real-time clock data when digitally recorded." Therefore, Yuen in view of Nakano makes obvious all limitations of the claim.

Claim 4 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. According to Yuen, sound responsive switch 18 "continuously monitor[s] a voltage level of the input audio signal." This is evidenced by the analog nature of Nakano's sound responsive switch monitoring component 18. When signal S_{A2} exceeds V_S, speech is detected by component 18. See column 3, lines 12-14 and 58-68. This corresponds to "determining that the audio event is ongoing." Therefore, Yuen in view of Nakano makes obvious all limitations of the claim.

Claim 7 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. As indicated in the rejection of claim 4, Yuen's process of "monitoring the input audio signal includes measuring a voltage level S_{A2} of the input audio signal" and when the audio signal "compares favorably to a voltage level threshold" the "audio even threshold" has been "satisfied."

The recording procedure detailed by Yuen follows: upon speech detection by switch 18, A/D converter 24 is "powered" by controlling power supply 20. See column 3, lines 44-48. The A/D converter inherently "samples the input audio signal to produce digital audio data," while compressor 26 "encodes the digital audio data to produce encoded digital audio data." Digital clock 58 generates the time and date information

related to when an audio capture occurred, and memory control address 28 records the audio samples and time and date information in memory 30. See column 3, line 56, through column 4, line 7, and column 6, lines 1-6. Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim 8 is limited to "the method of claim 7," as covered by Yuen in view of Nakano. The limitation "low-resolution ADC" is taken broadly herein since it is not clear what exactly constitutes a low-resolution ADC. In this way, A/D converter 24 of Yuen corresponds to the claimed "low-resolution ADC." Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim 9 is limited to "the method of claim 7," as covered by Yuen in view of Nakano. The limitation "high-resolution ADC" is taken broadly herein since it is not clear what exactly constitutes a high-resolution ADC. In this way, A/D converter 24 of Yuen corresponds to the claimed "high-resolution ADC." Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim 11 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. The system of Yuen includes an user-operated switch 22 to disable operation of all circuit components, including sound responsive switch 18. See column 3, lines 50-52. This switch forces the user of Yuen's recording method to decide when to "monitor the input audio signal," such that, monitoring occurs "only during pre-determined time periods corresponding to when the audio event is expected in order to reduce energy consumption." Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim 12 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. According to Nakano, when the input signal falls below threshold signal V_S, the output of component falls to indicate a non-speech event. In response to a non-speech event, only the switch 18 is energized, which means the system of Yuen stops recording. See column 3, lines 49-50. Therefore, Yuen in view of Nakano makes obvious all limitations of the claim.

Claims 13, 15 and 16 are limited to "an apparatus for digitally recording and time stamping an input audio signal during an audio event," which includes components that perform the functions of claims 1, 3 and 4, as covered by Yuen in view of Nakano. Thus, it is enough to say that Yuen in view of Nakano also anticipate these claims; but to be complete, note the microphone 16 of Yuen corresponds to the "input that receives the input audio signal," sound responsive switch 18 corresponds to the "audio event detection module," memory address control 28 corresponds to the "digital data recording and time-stamping module" and memory 30 corresponds to the "memory" and digital clock 58 corresponds to the "real-time clock module." Moreover, sound responsive switch 18 includes a "voltage level monitor" 17 for "determining the voltage level of the input audio signal" and components 18 for comparing the voltage level of the input to a "voltage level threshold" V_S.

Claim 23 is limited to "the apparatus of claim 13," as covered by Yuen in view of Nakano. Yuen discloses a battery power supply 20. See column 3, lines 44-46. The battery powers all elements depicted in figure 2. See column 3, liens 46-48. Therefore, Yuen in view of Nakano anticipates all limitations of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen in view of Nakano and further in view of Okano et al. (US Patent 6,031,915).**

Claim 2 is limited to "the method of claim 1," as covered by Yuen in view of Nakano. Yuen discloses that compressor 26 uses any known available compression algorithm. See column 3, lines 62-67. However, Yuen does not specifically recite any of the standards listed in this claim; this deficiency is overcome by an obvious modification.

Yuen intimates that the compression algorithm used is not controlling; in fact, any could be used. One type of well-known algorithms used in handheld recorders is ADPCM, i.e., "PCM encoding," as recited. Use of this algorithm is taught by Okano, who discloses a voice recording apparatus, in column 46-48.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of any known compression algorithm, for example, ADPCM, or PCM, as taught by Okano since Yuen fails to require any specific type, intimating that any type could be used.

Claim 14 is limited to "the apparatus of claim 13," as covered by Yuen in view of Nakano. Yuen discloses that compressor 26 uses any known available compression algorithm. See column 3, lines 62-67. However, Yuen does not specifically recite any of the standards listed in this claim; this deficiency is overcome by an obvious modification.

Yuen intimates that the compression algorithm used is not controlling; in fact, any could be used. One type of well-known algorithms used in handheld recorders is ADPCM, i.e., "PCM encoding," as recited. Okano, who discloses a voice recording apparatus, teaches use of this algorithm in column 11, lines 46-48.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of any known compression algorithm, for example, ADPCM, or PCM, as taught by Okano since Yuen fails to require any specific type, intimating that any type could be used.

3. **Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen in view of Nakano and further in view of Dwyer et al. (US Patent 6,571,211).**

Claim 22 is limited to "the apparatus of claim 13," as covered by Yuen in view of Nakano. It is noted that neither Yuen nor Nakano refer to USB, let alone mass storage. However, this deficiency is overcome by an obvious modification.

In particular, Dwyer discloses a digital audio recorder that overcomes the deficiencies of Yuen and Nakano. As set forth in column 1, lines 20-31, Yuen and Nakano's recorders fail to provide satisfactory integration of portable digital audio recorders with other information management devices, such as personal computers and

computer networks. In solution, Dwyer provides a data port 66 with his digital portable recorder. See column 4, lines 38-53. The method by which data is communicated includes USB. See column 10, lines 35-39. However, off all USB specifications, Dwyer fails to mention any. However, Official Notice is taken of the USB Mass-storage specification and its requirements as being notoriously well-known at the time of the invention.

It would have been obvious to one of ordinary skill in the art to modify Yuen to include a USB-compliant data port as taught by Dwyer for the purpose of overcoming the problems identified by Dwyer. Moreover, it would have been obvious to implement a USB-MSC-compliant data port since Dwyer fails to mention what USB specification to follow, suggesting any known specification is applicable and because USB-MSC is notoriously well known.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PATENT EXAMINER